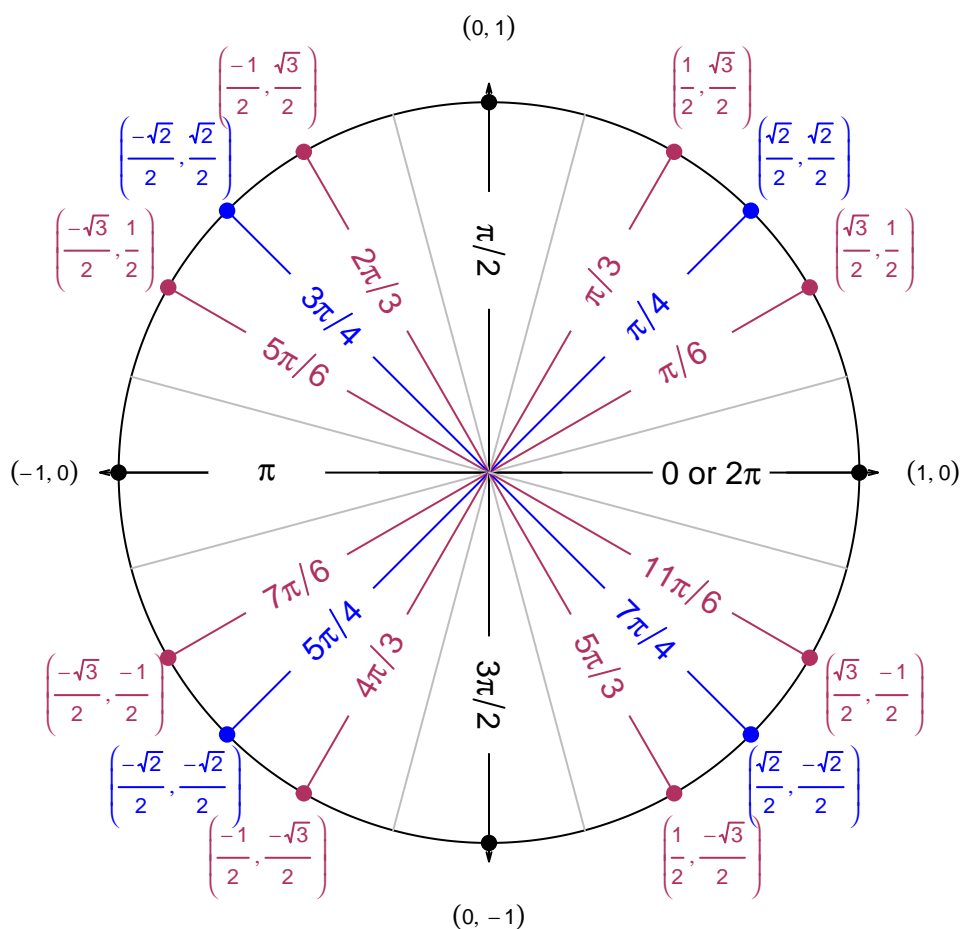


Name: \_\_\_\_\_

Date: \_\_\_\_\_

A unit circle diagram shows the  $xy$  coordinates of special angles. For point  $(x, y)$  at angle  $\theta$ , we define the trigonometric functions so that  $\sin(\theta) = y$  and  $\cos(\theta) = x$ .



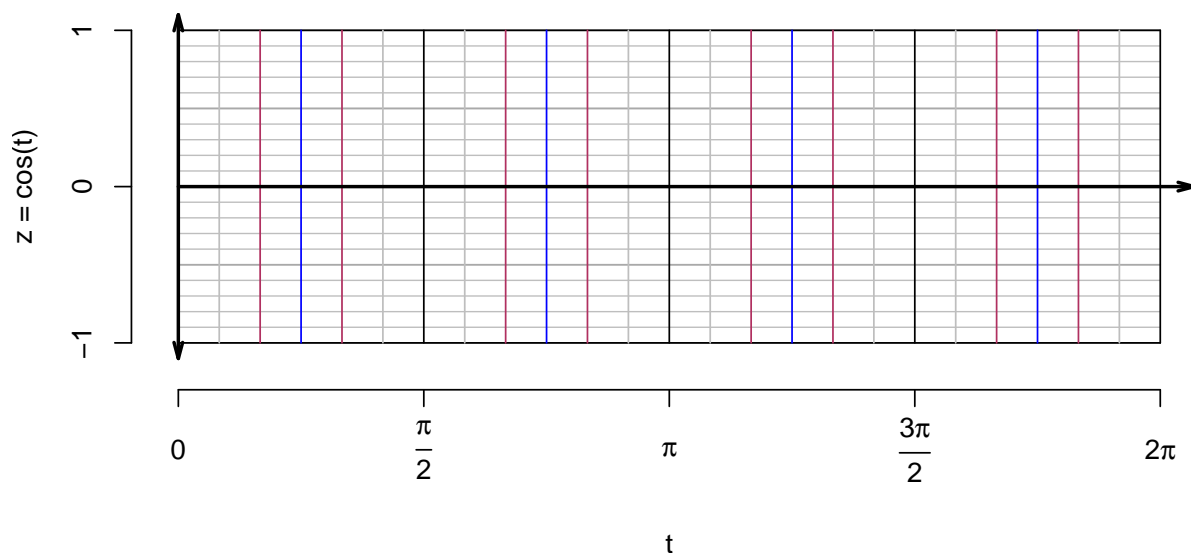
In order to graph the sinusoidal wave functions, it will help to use the following decimal approximations:  
 $\frac{\sqrt{2}}{2} \approx 0.71$  and  $\frac{\sqrt{3}}{2} \approx 0.87$ .

Please make a table relating the angles to the **decimal** values.

$\theta$	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$	$2\pi/3$	$3\pi/4$	$5\pi/6$	$\pi$
$\cos(\theta)$									
$\sin(\theta)$									

$\theta$	$\pi$	$7\pi/6$	$5\pi/4$	$4\pi/3$	$3\pi/2$	$5\pi/3$	$7\pi/4$	$11\pi/6$	$2\pi$
$\cos(\theta)$									
$\sin(\theta)$									

On a  $tz$  plane, plot  $z = \cos(t)$ . You should use the first and second rows, and all 17 columns, from the first page. Be as accurate as possible. Connect the points with a smooth curve.



On a  $tz$  plane, plot  $z = \sin(t)$ . You should use the first and third rows, and all 17 columns, from the first page. Be as accurate as possible. Connect the points with a smooth curve.

